## TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT and TITLE I PERMIT<sup>1</sup>

## PERMITTEE

Bunge Foods Corporation

Attn: Robert L. Grey, Utilities Manager/Project Engineer

11720 Borman Road

St. Louis, Missouri 63146

Application No.: 96030136 I.D. No.: 091801AAH

Applicant's Designation: Date Received: March 7, 1996

Operation of: Edible Oil Processing
Date Issued: August 6, 2001 Expiration Date<sup>2</sup>: August 6, 2006 Source Location: 885 North Kinzie Avenue, Bradley, Kankakee County

Responsible Official: James Mannes, Assistant Vice President

This permit is hereby granted to the above-designated Permittee to OPERATE an edible oil processing source, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Jonathan Sperry at 217/782-2113.

Donald E. Sutton, P.E. Manager, Permit Section Division of Air Pollution Control

DES:JS:psj

cc: Illinois EPA, FOS, Region 1

- This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.
- Except as provided in Condition 8.7 of this permit.

# TABLE OF CONTENTS

			PAGE
1.0	SOURC	E IDENTIFICATION	4
	1.1 1.2 1.3 1.4	Source Owner/Parent Company Operator General Source Description	
2.0	LIST	OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT	5
3.0	INSIG	NIFICANT ACTIVITIES	6
	3.1 3.2 3.3	Identification of Insignificant Activities Compliance with Applicable Requirements Addition of Insignificant Activities	
4.0	SIGNI	FICANT EMISSION UNITS AT THIS SOURCE	9
5.0	OVERA	LL SOURCE CONDITIONS	10
	5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8		
6.0	NOT A	PPLICABLE TO THIS PERMIT	16
7.0	UNIT	SPECIFIC CONDITIONS	17
	7.1 7.2	Fuel Combustion Equipment Gas-Fired Turbine/Generator	
8.0	GENER	AL PERMIT CONDITIONS	31
	8.1 8.2 8.3 8.4 8.5 8.6	Permit Shield Applicability of Title IV Requirements Emissions Trading Programs Operational Flexibility/Anticipated Operating Scenarios Testing Procedures Reporting Requirements Obligation to Comply with Title I Requirements	
9 N	CILVILD	ARD DERMIT CONDITIONS	36

			PAGE
	9.1	Effect of Permit	
	9.2	General Obligations of Permittee	
	9.3	Obligation to Allow Illinois EPA Surveillance	
	9.4	Obligation to Comply with Other Requirements	
	9.5	Liability	
	9.6	Recordkeeping	
	9.7	Annual Emissions Report	
	9.8	Requirements for Compliance Certification	
	9.9	Certification	
		Defense to Enforcement Actions	
		Permanent Shutdown	
		Reopening and Reissuing Permit for Cause	
		Severability Clause	
	9.14	Permit Expiration and Renewal	
0	ATTACI	HMENTS	
	10.1	Attachment 1 - Example Certification by a Responsible Official	1-1
	10.2	Attachment 2 - Guidance on Revising This Permit	2-1
	10.3	Attachment 3 - Form 199-CAAPP, Application For Construction Permit (For CAAPP Sources Only)	3-1
	10.4	Attachment 4 - Guidance on Renewing this Permit	4-1

10.

### 1.0 SOURCE IDENTIFICATION

#### 1.1 Source

Bunge Foods Corporation 885 North Kinzie Avenue Bradley, Illinois 60915 815/937-8164

I.D. No.: 091801AAH

Standard Industrial Classification: 2079, Shortening and Cooking

Oils

## 1.2 Owner/Parent Company

Bunge Foods Corporation 11720 Borman Road St. Louis, Missouri 63146

### 1.3 Operator

Bunge Foods Corporation 885 North Kinzie Avenue Bradley, Illinois 60915

Robert L. Grey, Utilities Manager/Project Engineer 815/937-8164

## 1.4 General Source Description

Bunge Foods Corporation is located at 885 North Kinzie Avenue in Bradley, Illinois. The source is an edible oil processing facility, which produces hydrogenated vegetable oils and animal fats. Liquid raw materials are received from railcars and tank trucks and stored in tanks equipped with carbon canisters for odor control. Raw vegetable oil is refined and coloring agents are removed by adsorption with bleaching clay. The materials are hydrogenated, blended to customer's specifications, and packaged or stored on-site. In addition, the source operates an electricity generating turbine.

# 2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]		
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1,		
	Stationary Point and Other Sources (and Supplements A through		
	F), USEPA, Office of Air Quality Planning and Standards,		
	Research Triangle Park, NC 27711		
ASTM	American Society for Testing and Materials		
Btu	British thermal unit		
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]		
CAAPP	Clean Air Act Permit Program		
CAM	Compliance Assurance Monitoring		
CFR	Code of Federal Regulations		
CO	Carbon Monoxide		
ft <sup>3</sup>	cubic foot		
HAP	Hazardous Air Pollutant		
hr	hour		
IAC	Illinois Administrative Code		
I.D. No.	Identification Number of Source, assigned by Illinois EPA		
ILCS	Illinois Compiled Statutes		
Illinois EPA	Illinois Environmental Protection Agency		
kg	kilogram		
kW	kilowatt		
1b	pound		
mmBtu	Million British thermal units		
MW	megawatt		
MWe	megawatt of electricity		
MW-hr	megawatt hour		
NESHAP	National Emission Standards for Hazardous Air Pollutants		
$NO_x$	Nitrogen Oxides		
NSPS	New Source Performance Standards		
PM	Particulate Matter		
PM <sub>10</sub>	Particulate matter with an aerodynamic diameter less than or		
	equal to a nominal 10 microns as measured by applicable test		
	or monitoring methods		
ppm	parts per million		
PSD	Prevention of Significant Deterioration		
RMP	Risk Management Plan		
scf	standard cubic foot		
SO <sub>2</sub>	Sulfur Dioxide		
T1	Title I - identifies Title I conditions that have been		
	carried over from an existing permit		
T1N	Title I New - identifies Title I conditions that are being		
	established in this permit		
T1R	Title I Revised - identifies Title I conditions that have		
	been carried over from an existing permit and subsequently		
	revised in this permit		
USEPA	United States Environmental Protection Agency		
MOV	Volatile Organic Material		

### 3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

Bleaching Clay Handling System B1
Dowtherm Boiler No. 1
Dowtherm Boiler No. 2
Dowtherm Boiler No. 3
Dowtherm A Heat Transfer Fluid Loops
Vegetable Oil and Animal Fat Piping System
Cooling Towers
Wastewater Treatment System

Dry Ingredient Silos with Sock Filters

3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

Equipment used for filling drums, pails, or other packaging containers, excluding aerosol cans, with soaps, detergents, surfactants, lubricating oils, waxes, vegetable oils, greases, animal fats, glycerin, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(8)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the

storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

Storage tanks of any size containing virgin or rerefined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

Loading and unloading systems for railcars, tank trucks, or watercraft that handle only the following liquid materials, provided an organic solvent has not been mixed with such materials: soaps, detergents, surfactants, lubricating oils, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(18)].

- 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).
- 3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.
- 3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that

- organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.
- 3.2.4 For each outside edible oil storage tank identified in Pollution Control Board Order PCB 72-125, the Permittee shall comply with the requirement to maintain and operate activated carbon canisters on the storage tank vents.
- 3.3 Addition of Insignificant Activities
  - 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
  - 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
  - 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

# 4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission		Date	Emission Control
Unit	Description	Constructed	Equipment
HR	Hydrogen Reformer (12.2 mmBtu/hr)	1967	None
SB1	Steam Boiler No. 1 (100 mmBtu/hr)	1966	None
DB	Duct Burner (58.4 mmBtu/hr)	August 1989	None
G1	Gas-Fired Turbine/Generator (37.6 mmBtu/hr)	May 1989	None

### 5.0 OVERALL SOURCE CONDITIONS

### 5.1 Source Description

- 5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of  $NO_x$  and  $SO_2$  emissions.
- 5.1.2 This permit is issued based on the source not being a major source of HAPs.

## 5.2 Applicable Regulations

- 5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.
- 5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:
  - a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.
- c. No person shall cause or allow the total emissions of sulfur dioxide into the atmosphere in any one hour period from all fuel combustion emission sources to exceed the emissions determined by 35 IAC 214.183 [35 IAC 214.182].

Compliance with this requirements is considered to be assured by the inherent operating conditions of all fuel combustion emission units combusting natural gas or #2 fuel oil.

### 5.2.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

### 5.2.4 Risk Management Plan

- a. This stationary source, as defined in 40 CFR Section 68.3, is subject to 40 CFR Part 68, the Accidental Release Prevention regulations [40 CFR 68.215(a)(1)].
- b. The owner or operator of a stationary source shall revise and update the RMP submitted, as specified in 40 CFR 68.190.
- 5.2.5 a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.
  - b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

### 5.2.6 Episode Action Plan

- a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.
- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:
  - i. Illinois EPA, Compliance Section; and
  - ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or
  - iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

## 5.3 Non-Applicability of Regulations of Concern

- 5.3.1 This permit is issued based on the source not being subject to 40 CFR Part 63, Subpart GGGG, Solvent Extraction for Vegetable Oil Production, because the source is not a major source of HAP. (See also Condition 5.5.2)
- 5.3.2 This permit is issued based on the source not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the source does not have a pollutant-specific emissions unit that uses an add-on control device to achieve compliance with an emission limitation or standard.

## 5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

### 5.5 Source-Wide Emission Limitations

## 5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	7
Sulfur Dioxide (SO <sub>2</sub> )	140
Particulate Matter (PM)	24
Nitrogen Oxides (NO <sub>x</sub> )	266
HAP, not included in VOM or PM	-
TOTAL	437

### 5.5.2 Emissions of Hazardous Air Pollutants

This permit is issued based on the emissions of HAPs as listed in Section 112(b) of the CAA not being equal to or exceeding 10 tons per year of a single HAP or 25 tons per year of any combination of such HAPs, so that this source is considered a minor source for HAPs.

### 5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

### 5.6 General Recordkeeping Requirements

#### 5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.2 Records for Operating Scenarios

N/A

- 5.6.3 Retention and Availability of Records
  - a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
  - b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

## 5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year.

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

## 5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and compliance procedures in Section 7 (Unit Specific Conditions) of this permit.

a. For the purpose of estimating fuel combustion emissions while burning natural gas or fuel oil, the current versions of AP-42, Sections 1.3, 1.4, and 3.1 are acceptable.

# 6.0 NOT APPLICABLE TO THIS PERMIT

### 7.0 UNIT SPECIFIC CONDITIONS

### 7.1 Fuel Combustion Equipment

### 7.1.1 Description

Hydrogen gas, used to hydrogenate raw materials, is produced by the Hydrogen Reformer. The Hydrogen Reformer is equipped with a natural gas-fired burner, with a heat input capacity of 12.2 mmBtu/hr, and a catalyst bed that cracks natural gas feed to form hydrogen. Emissions from this unit include natural gas combustion products.

Steam and heat for this source are provided by a natural gas-fired duct burner and a steam boiler. The duct burner has a heat input capacity of 58.4 mmBtu/hr. The steam boiler is fueled primarily by natural gas, with #2 fuel oil as a backup, and has a heat input capacity of 100 mmBtu/hr. Emissions from these units include fuel combustion products.

## 7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission		Emission Control
Unit	Description	Equipment
HR	Hydrogen Reformer (12.2	None
	mmBtu/hr)	
SB1	Steam Boiler No. 1 (100	None
	mmBtu/hr)	
DB	Duct Burner (58.4	None
	mmBtu/hr)	

## 7.1.3 Applicability Provisions and Applicable Regulations

- a. The "affected fuel combustion units" for the purpose of these unit-specific conditions, are emission units which burn fuel to produce heat or power by indirect heat transfer, as described in Conditions 7.1.1 and 7.1.2.
- b. Each affected fuel combustion unit is subject to 35 IAC 216.121, which states that the emission of CO into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) shall not exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].
- c. Steam Boiler No. 1 is subject to 35 IAC 212.207, which provides that no person, while simultaneously burning more than one type of fuel in a fuel combustion emission unit, shall cause or allow the emission of particulate matter into the atmosphere in any one hour period in excess of the following equation:

E = AS + BL

where

- E = Allowable emission rate (kg/hr or lb/hr);
- A = 0 (since no solid fuel is burned);
- B = 0.155 kg/MW-hr (0.10 lb/hr);
- L = Actual heat input from liquid fuel (MW or mmBtu/hr).

[35 IAC 212.207]

d. Steam Boiler No. 1 is subject to 35 IAC 214.162, which provides that no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any fuel combustion emission source burning simultaneously any combination of solid, liquid and gaseous fuels to exceed the allowable emission rate determined by the following equation:

E = AX + BY + CZ

where

- E = allowable sulfur dioxide emission rate (kg/hr
   or lb/hr);
- A = 0 (since no solid fuel is burned);
- B = 0.46 kg/MW-hr (0.3 lb/mmBtu);
- C = 1.55 kg/MW-hr (1.0 lb/mmBtu);
- Y = actual heat input from distillate fuel oil or the gasification of distillate fuel oil (MW or mmBtu/hr); and
- Z = actual heat input from residual fuel oil or the gasification of residual fuel oil or any other liquid fuel (MW or mmBtu/hr);

[35 IAC 214.162]

e. Each affected fuel combustion unit is subject to the emission limits identified in Condition 5.2.2.

### 7.1.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on each affected fuel combustion unit not being subject to 35 IAC 217.141, because the actual heat input of each affected fuel combustion unit is less than 73.2 MW (250 mmBtu/hr).
- b. Pursuant to 35 IAC 218.303, each affected fuel combustion unit, i.e., fuel combustion emission unit, is not subject to 35 IAC 218.301, Use of Organic Material.
- c. This permit is issued based on each affected fuel combustion unit not being subject to the New Source Performance Standard 40 CFR 60 Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units, since each affected fuel combustion unit was constructed, modified, or reconstructed prior to June 9, 1989, which is the applicability date of this regulation.

## 7.1.5 Operational And Production Limits And Work Practices

- a. The Duct Burner shall only be fired with natural gas. Steam Boiler No. 1 shall only be fired with natural gas or #2 fuel oil.
- b. Usage of #2 fuel oil in Steam Boiler No. 1 shall not exceed 7 million gallons per year.
- c. The Permittee shall not keep, store, or use distillate fuel oil (Grades No. 1 and 2 fuels) in the affected boilers with a sulfur content greater than the larger of the following two values:
  - i. 0.28 weight percent, or
  - ii. The weight percent given by the formula:

    maximum weight percent sulfur = (0.000015) x

    (Gross heating value of oil, Btu/lb).
- d. Organic liquid by-products or waste materials shall not be used in the affected fuel combustion units without written approval from the Illinois EPA.

### 7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected fuel combustion units are subject to the following:

a. Emissions from the Hydrogen Reformer (HR) and Duct Burner (DB) shall not exceed the following limits:

Emission		Pollutant	Emissions
<u>Unit</u>	Pollutant	(Lb/Hour)	(Ton/Year)
HR	$NO_x$	_	5.1
HR	CO	_	1.0
HR	PM	-	0.13
HR	MOV	_	0.39
HR	$SO_2$	-	0.03
DB	$NO_x$	13.50	57.8
DB	CO	5.3	22.7

These limits are based on the maximum emissions from natural gas combustion at the maximum operating rates of the affected fuel combustion units.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations were established in Permits 85030072 and 89020040, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

## 7.1.7 Testing Requirements

The Illinois EPA shall be allowed to sample all fuels stored at this source.

## 7.1.8 Monitoring Requirements

None

## 7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected fuel combustion unit to demonstrate compliance with Conditions 5.5.1, 7.1.5, and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

a. Total natural gas usage for the affected fuel combustion units (ft³/month and ft³/year);

- b. Total distillate fuel oil usage for Steam Boiler No.
   1 (gallons/month and gallons/year);
- c. The maximum sulfur content (weight percent) and the gross heating value of oil (Btu/lb) for each supplier of fuel oil; and
- d. Annual aggregate  $NO_x$ , CO, PM,  $SO_2$ , and VOM emissions from the affected fuel combustion units, based on fuel consumption and the applicable emission factors, with supporting calculations.

## 7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of an affected fuel combustion unit with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. The Permittee shall submit notification within 60 days of operation of an affected fuel combustion unit that may not have been compliance with the opacity limitations in Condition 5.2.2(b), with a copy of such record for each incident.
- b. If there is an exceedance of sulfur content limits for distillate fuel oil, the Permittee shall submit a report within 30 days after receipt of a noncompliant shipment of distillate fuel oil.
- c. The Permittee shall report emissions of  $NO_x$ , CO, PM,  $SO_2$ , or VOM in excess of the limits specified in Conditions 5.5.1 and 7.1.6, based on the current month's records plus the preceding 11 months, within 30 days of such an occurrence.

## 7.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected fuel combustion unit without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

The Permittee may combust natural gas and/or #2 fuel oil in Steam Boiler No. 1.

### 7.1.12 Compliance Procedures

- a. Compliance with the PM and CO emission limits in Condition 7.1.3(b) and (c) is demonstrated under inherent operating conditions of the affected fuel combustion units, so that no compliance procedures are set in this permit addressing this requirement.
- b. Compliance with the  $SO_2$  emission limit in Condition 7.1.3(d) is demonstrated under inherent operating conditions of the affected fuel combustion units fired by distillate fuel oil with a sulfur content meeting the specifications of Condition 7.1.5.
- c. Compliance with the emission limits of this permit shall be based on the recordkeeping requirements in Condition 7.1.9 and the emission factors and formulas listed below:
  - i. Emissions from the affected fuel combustion units burning natural gas shall be calculated based on the following emission factors:

Pollutant	Emission Factor $\frac{(1b/10^6 \text{ ft}^3)}{}$
PM	7.6
$SO_2$	0.6
VOM	5.5
$NO_x$	100.0
CO	84.0

These are the emission factors for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I, Supplement F, March 1998.

Emissions (lb) = Natural gas consumed  $(ft^3)$  multiplied by the appropriate emission factor.

ii. Emissions from the affected fuel combustion units burning distillate fuel oil shall be calculated based on the following emission factors:

Emission Factor (1b/10 <sup>3</sup> gallons)
3.3
20.0
142*S
0.2
5.0

These are the emission factors for uncontrolled fuel oil combustion in small (<100 mmBtu/hr) industrial boilers, Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Volume I, Supplement E, September 1998. "S" indicates that the weight percent of sulfur in the oil should be multiplied by the value given. For example, if the fuel is 1% sulfur, then S=1.

Emissions (lb) = distillate fuel oil consumed (gallons) multiplied by the appropriate emission factor.

iii. Total emissions for each pollutant are to be determined by combining the results of Conditions 7.1.12(c)(i) and (ii) for all affected fuel combustion units.

### 7.2 Gas-Fired Turbine/Generator

### 7.2.1 Description

Electricity for this source is generated by the Gas-Fired Turbine/Generator, which is rated for 3,500 kW at base load with a heat input capacity of 37.6 mmBtu/hr. Emissions from this unit are natural gas combustion products. Waste heat from this unit is also used in conjunction with the emission units in Section 7.1 of this permit to produce steam.

## 7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission		Emission Control
Unit	Description	Equipment
G1	Gas-Fired	None
	Turbine/Generator (37.6	
	mmBtu/hr)	

## 7.2.3 Applicability Provisions and Applicable Regulations

- a. The "affected gas turbine" for the purpose of these unit-specific conditions, is an emission unit which produces electricity, as described in Conditions 7.2.1 and 7.2.2.
- b. The affected gas turbine is subject to the NSPS for Stationary Gas Turbines, 40 CFR 60 Subparts A and GG, because the heat input at peak load is equal to or greater than 10.7 gigajoules per hour (10 mmBtu/hr), based on the lower heating value of the fuel fired and the affected gas turbine was constructed, modified, or reconstructed after October 3, 1977. The Illinois EPA administers the NSPS for subject sources in Illinois pursuant to a delegation agreement with the USEPA.
- c. The affected gas turbine is subject to 35 IAC 218 Subpart G, Use of Organic Material, which provides that:

No person shall cause or allow the discharge of more than  $3.6~\mathrm{kg/hr}$  ( $8~\mathrm{lb/hr}$ ) of organic material into the atmosphere from any emission unit, except as provided in  $35~\mathrm{IAC}$  218.302 and the following exception: If no odor nuisance exists the limitation of  $35~\mathrm{IAC}$  218 Subpart G shall apply only to photochemically reactive material [ $35~\mathrm{IAC}$  218.301].

d. The affected gas turbine is subject to the emission limits identified in Condition 5.2.2.

## 7.2.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected gas turbine not being subject to 35 IAC 214.122, for  $\rm SO_2$  emissions from small sources, because the affected gas turbine does not burn liquid or solid fuel exclusively.
- b. This permit is issued based on the affected gas turbine not being subject to 35 IAC 216.121, for CO emissions from fuel combustion emission units, because the affected gas turbine is not by definition a fuel combustion emission unit.
- c. This permit is issued based on the affected gas turbine not being subject to 35 IAC 217.121, for  $\rm NO_x$  emissions from new emission sources, because the actual heat input of the affected gas turbine is less than 73.2 MW (250 mmBtu/hr) and the affected gas turbine is not by definition a fuel combustion emission unit.
- d. This permit is issued based on the affected gas turbine not being subject to 35 IAC 217 Subpart U,  ${\rm NO_x}$  Control and Trading Program, because the affected gas turbine has a maximum design heat input less than less than 250 mmBtu/hr.
- e. This permit is issued based on the affected gas turbine not being subject to 35 IAC 217 Subpart V, Electric Power Generation, because the affected gas turbine has a nameplate capacity less than 25 MWe.
- f. This permit is issued based on the affected gas turbine not being subject to 35 IAC 212.321 because due to the unique nature of this process, such rules cannot reasonably be applied.

## 7.2.5 Operational and Production Limits and Work Practices

a. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected gas turbine in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or the USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11(d)].

- b. The Permittee shall comply with either Condition 7.2.6(b) or the following condition: No owner or operator of the affected gas turbine shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight [40 CFR 63.333(b)].
- c. The affected gas turbine shall only be fired with natural gas.

### 7.2.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected gas turbine is subject to the following:

a. Standard for Nitrogen Oxides:

Pursuant to 40 CFR 60.332(c) and (d), no owner or operator of the affected gas turbine shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0150 * \frac{(14.4)}{Y} + F$$

where:

STD = allowable  $NO_x$  emissions (percent by volume at 15 percent oxygen and on a dry basis).

- Y = manufacturer's rated heat rate at manufacturer's peak load (kilojoules per watt hour), or actual measured heat rate based on lower heater value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.
- $\label{eq:F} F = NO_x \text{ emission allowance for fuel-bound nitrogen} \\ \text{calculated from the nitrogen content of the} \\ \text{fuel as follows:}$

Fuel-bound nitrogen	F
(percent by weight)	(NO $_{\rm x}$ percent by volume)
N < 0.015	0
0.015 < N < 0.1	0.04*(N)
0.1 < N < 0.25	0.04 + 0.0067 * (N - 0.1)
N > 0.25	0.005

#### where:

N = the nitrogen content of the fuel (percent by weight) determined in according with Condition 7.2.8.

[40 CFR 60.332(a)(2) and (3)]

b. Standard for Sulfur Dioxide

The Permittee shall comply with either Condition 7.2.5(b) or the following condition: No owner or operator of the affected gas turbine shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis [40 CFR 60.333(a)].

c. Emissions from the affected gas turbine shall not exceed the following limits:

	Pollutant	Emissions
Pollutant	(Lb/Hour)	(Ton/Year)
$NO_x$	29.56	126.6
CO	2.0	8.6

These limits are based on the maximum emissions from natural gas combustion at the maximum operating rate of the affected gas turbine.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations were established in Permit 89020040, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

# 7.2.7 Testing Requirements

a. To compute the nitrogen oxide emission limit standard, the Permittee shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Illinois EPA or the USEPA to determine the nitrogen content of the fuel fired [40 CFR 60.335(a)].

- b. The Permittee shall determine compliance with the sulfur content standard in Condition 7.1.5(b) as follows: ASTM D1072-80 or 90, D3031-81, D4084-82 or 94, or D3246-81, 92, or 96 shall be used for the sulfur content of gaseous fuels. The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels or sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Illinois EPA or the USEPA [40 CFR 60.335(d)].
- c. To meet the requirements of Condition 7.1.8 (see also 40 CFR 60.334(b)), the owner or operator shall use the methods specified in Conditions 7.1.7(a) and (b) (see also 40 CFR 60.335(a) and (d)) to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the Permittee, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency [40 CFR 60.335(e)].

## 7.2.8 Monitoring Requirements

The Permittee shall monitor sulfur content and nitrogen content of the fuel being fired in an affected gas turbine. For natural gas, which is supplied without intermediate bulk storage, the values shall be determined and recorded from monthly data provided by the natural gas supplier. This is a custom schedule for determination of the values based on the design and operation of the affected gas turbine and the characteristics of the fuel supply, substantiated with data submitted to and approved by the Illinois EPA [40 CFR 60.334(b)(2)].

## 7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected gas turbine to demonstrate compliance with Conditions 5.5.1, 7.2.5, 7.2.6, and 7.2.8, pursuant to Section 39.5(7)(b) of the Act:

- a. The heat rate of the affected gas turbine at the rated peak load based on manufacturer's information or the measured heat rate of the affected gas turbine based on the lower heating value of the fuel as measured at actual peak load, kilojoules per watt hour;
- b. Natural gas fuel usage for the affected gas turbine  $(ft^3/month and ft^3/year);$

- c. The heat content of the natural gas burned in the affected gas turbine (Btu/ft³); and
- d. The nitrogen and sulfur content of the fuel burned in the affected gas turbine as monitored pursuant to Condition 7.2.8;
- e. Monthly and annual aggregate  $NO_x$ , CO, PM,  $SO_2$ , and VOM emissions from the affected gas turbine shall be maintained, based on fuel consumption and the applicable emission factors in Condition 7.2.12, with supporting calculations.

## 7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected gas turbine with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. Pursuant to 40 CFR 60.334(c), periods of excess emissions that shall be reported are defined as follows:
  - i. Nitrogen oxides.

Any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required in 40 CFR 60.8. Each report shall include the average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under Condition 7.1.7(a) (see also 40 CFR 60.335(a)) [40 CFR 60.334(c)(1)].

ii. Sulfur dioxide.

Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 percent [40 CFR 60.334(c)(2)].

b. The Permittee shall report emissions of  $NO_x$  or CO from the affected gas turbine in excess of the limits specified in Condition 7.1.6, based on the current month's records plus the preceding 11 months, within 30 days of such an occurrence.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios  $$\mathrm{N/A}$$ 

### 7.2.12 Compliance Procedures

- a. Compliance with the operational limits in Condition 7.2.5 shall be determined based on the testing, monitoring, and recordkeeping requirements in Conditions 7.2.7 through 7.2.9.
- b. Compliance with the nitrogen oxides standard in Condition 7.2.6(a) shall be determined by the testing, monitoring, and recordkeeping requirements in Conditions 7.2.7 through 7.2.9.
- c. Compliance with the emission limits in Condition 7.2.3 and 7.2.6 shall be based on the recordkeeping requirements in Condition 7.2.9 and the emission factors and formulas listed below:

	Emission Factor
Pollutant	(lb/mmBtu)
$NO_x$	$3.264 * 10^{-1}$
CO	$8.364 * 10^{-2}$
PM	$6.732 * 10^{-3}$
$SO_2$	$(9.588 * 10^{-1}) * S$
VOM	$2.142 * 10^{-3}$

These are the emission factors for uncontrolled natural gas-fired gas turbines based on an average fuel heating value of 1000 Btu/scf, Table 3.1-1, Volume I, Supplement F, April 2000. "S" indicates that the weight percent of sulfur in the fuel should be multiplied by the value given. For example, if the fuel is 0.1% sulfur, then S=0.1.

Gas Turbine Emissions (lb) = (Natural Gas Consumed, ft $^3$ ) x (Heat Content, Btu/ft $^3$ ) x (The Appropriate Emission Factor, lb/mmBtu) x  $10^{-6}$ 

### 8.0 GENERAL PERMIT CONDITIONS

#### 8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after June 21, 2001 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(0)(vii) of the Act].

As of the date of issuance of this permit, there are no such economic incentive, marketable permit or emission trading programs that have been approved by USEPA.

- 8.4 Operational Flexibility/Anticipated Operating Scenarios
  - 8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this

permit, provided that [Section 39.5(12)(a)(i) of the
Act]:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;
- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
  - i. Describe the physical or operational change;
  - ii. Identify the schedule for implementing the physical or operational change;
  - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
  - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
  - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

### 8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

## 8.6 Reporting Requirements

### 8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

## Monitoring Period

Report Due Date

January - June

September 1

July - December

March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

### 8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;
- e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

g. Any proposed use of an alternative test method, with detailed justification.

### 8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

### 8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
  - i. Illinois EPA Air Compliance Section

Illinois Environmental Protection Agency Bureau of Air Compliance Section (MC 40) P.O. Box 19276 Springfield, Illinois 62794-9276

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency Division of Air Pollution Control 9511 West Harrison Des Plaines, Illinois 60016 iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency Division of Air Pollution Control Permit Section (MC 11) P.O. Box 19506 Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (AE - 17J) Air & Radiation Division 77 West Jackson Boulevard Chicago, Illinois 60604

- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.
- 8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

### 9.0 STANDARD PERMIT CONDITIONS

#### 9.1 Effect of Permit

- 9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].
- 9.1.2 In particular, this permit does not alter or affect the following:
  - a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
  - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  - c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
  - d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.
- 9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

## 9.2 General Obligations of Permittee

### 9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(0)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

## 9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

## 9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

## 9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

## 9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(0)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

### 9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control

equipment), practices, or operations regulated or required under this permit;

- d. Sample or monitor any substances or parameters at any location:
  - i. At reasonable times, for the purposes of assuring permit compliance; or
  - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.
- 9.4 Obligation to Comply with Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

#### 9.5 Liability

## 9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

## 9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

## 9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

### 9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any

loss due to damage, installation, maintenance, or operation of the source.

### 9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(0)(iv) of the Actl.

## 9.6 Recordkeeping

## 9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

### 9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

### 9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

# 9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

## 9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance

certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

#### 9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

### 9.10 Defense to Enforcement Actions

# 9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(0)(ii) of the Act].

### 9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
  - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

Normally, an act of God such as lightning or flood is considered an emergency;

- ii. The permitted source was at the time being properly operated;
- iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
- iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

### 9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

### 9.12 Reopening and Reissuing Permit for Cause

### 9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

### 9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

## 9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

## 9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

## 9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements

underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

## 9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(1), (n), and (o) of the Act].

### 10.0 ATTACHMENTS

10.1 Attachment 1 Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:	
Name:	
Official Title:	
Telephone No.:	
Date Signed:	

### 10.2 Attachment 2 Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

- 1. Administrative Permit Amendment;
- 2. Minor Permit Modification; and
- 3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

### 1. Administrative Permit Amendment

- Corrects typographical errors;
- Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
- Requires more frequent monitoring or reporting by the Permittee;
- Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA;
- Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits; or
- Incorporates into the CAAPP permit revised limitations or other requirements resulting from the application of an approved economic incentives rule, marketable permits rule, or generic emissions trading rule.

## 2. Minor Permit Modification

Do not violate any applicable requirement;

- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
  - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA; and
- Are not required to be processed as a significant permit modification.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source's suggested draft permit/conditions;
- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- Information as contained on form 271-CAAPP for the Illinois EPA to use to notify USEPA and affected States.

# 3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;
- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

• A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.

Form 199-CAAPP, Application For Construction Permit (For CAAPP Sources Only)

For Illinois EPA use only



Illinois Environmental Protection Agency
Division Of Air Pollution Control -- Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

Application For Construction				ID number:						
Application For Construction Permit (For CAAPP Sources Only)			Perr	Permit number:						
	T GITTIL (FOI CAAPP Sources Only)			Date received:						
	This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.									
	Source Information									
1.	1. Source name:									
2.	Source street address:									
3.	City:			4. Zip code:						
5.	Is the source located within city limits?				☐ Yes ☐ No					
6.	Township name:	7. County:			8. ID number:					
		Owner I	nforn	nation						
9.	Name:	OWNER								
10.	Address:									
11.	City:	12. State:			13. Zip code:					
	0	1(	/:c !:	· · · · · · · · · · · · · · · · · · ·		_				
4.4	•	Information	(It al	rrerent	from owner)					
14.	Name									
15.	Address:									
16.	City:	17. State:			18. Zip code:					
		Applicant								
19.	Who is the applicant?  ☐ Owner ☐ Operator		20. All correspondence to: (check one)  ☐ Owner ☐ Operator ☐ Source							
21.	21. Attention name and/or title for written correspondence:									
22.	Technical contact person fo	r application:	23. Contact person's telephone number:							

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

	Summary Of Application Contents							
24.	Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs:	☐ Yes ☐ N	No					
	following programs: a)Non-attainment New Source Review – 35 IAC Part 203;							
	b)Prevention of Significant Deterioration (PSD) – 40 CFR 52.21;							
	c)Hazardous Air Pollutants: Regulations Governing Constructed or							
	Reconstructed Major Sources – 40 CFR Part 63?							
25.	Does the application identify and address all applicable emissions	☐ Yes ☐ N	No					
	standards, including those found in the following: a)Board Emission Standards – 35 IAC Chapter I, Subtitle B;	<b>_</b>	•-					
	b) Federal New Source Performance Standards – 40 CFR Part 60;							
	c)Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?							
26.	Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?	☐ Yes ☐ N	No					
27.	Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	☐ Yes ☐ N	No					
28.	Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control	☐ Yes ☐ N	No					
	equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing							
	any outstanding legal actions by either the USEPA or the Illinois EPA?							
	Note: The use of "APC" application forms is not appropriate for							
	applications for CAAPP sources. CAAPP forms should be used to supply information.							
29.	If the application contains TRADE SECRET information, has such							
	information been properly marked and claimed, and have two separate	☐ Yes ☐ N	No					
	copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?							
	Submitted, in accordance with applicable rules and regulations:	☐ Not Applicable						
		TRADE SEC						
		information in	n this					
Note	4. Answering "No" to any of the chave may result in the application being (	application						
NULE	Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.							
	Signature Block							
	This certification must be signed by a responsible official. Applications with certification will be returned as incomplete.	nout a signed	_					
30.								
	inquiry, the statements and information contained in this application are tru	ie. accurate and						

inquiry, the statements and information contained in this application are true, accurate and complete.

Authorized Signature:

AUTHORIZED SIGNATURE

TITLE OF SIGNATORY

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

TYPED OR PRINTED NAME OF SIGNATORY

DATE

### 10.4 Attachment 4 Guidance on Renewing This Permit

<u>Timeliness</u> - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

- 1. A completed form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.
- 2. A completed compliance certification for the source. For this purpose, the Illinois EPA will accept a copy of the most recent form 401-CAAPP, ANNUAL COMPLIANCE CERTIFICATION submitted to the Illinois EPA.
- 3. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.
- 4. Information addressing any outstanding transfer agreement pursuant to the ERMS.
- 5. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. The boxes should be marked yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT, as existing information is being incorporated by reference.
  - b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA

may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.html.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

Illinois Environmental Protection Agency Division of Air Pollution Control Permit Section (MC 11) P.O. Box 19506 Springfield, Illinois 62794-9506